AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently amended) An integrated conveyor system comprising a number of trucks, and a number of independent modules, each comprising a pair of rails, and a powered belt stretched inside the transverse space defined between the pair of rails; the modules being arranged with the pairs of rails end to end to form a substantially continuous support and guide structure for said trucks, which run along said pairs of rails, and each have at least one pair of grip pads, which, with the aid of push means, selectively engage, and are moved along the rails in a predetermined direction by, the powered belts of said modules; the pads of each truck being located such a distance apart that, when a truck leaves a first module to engage a second module adjacent to the first, at least one pad of the truck still cooperates with the belt of at least one of said first and second modules; characterized by also comprising:

- a number of modules having no powered belt, and aligned to define a work line; and
- a push module having a powered belt and located at a first end of the work line;
- each of said number of trucks having stop means for forming, along said work line and downstream from the push module, a train of trucks contacting one another between said rails; the train of trucks being pushed along at a predetermined speed by the powered belt of the push module only.

2. (Previously presented) An integrated conveyor system as claimed in claim 1, characterized by also comprising a brake module having a nonpowered idle belt, and located at a second end of the work line opposite the first end.

3. (Previously presented) An integrated conveyor system as claimed in claim 1, characterized in that said powered belts and said idle belt are each stretched, to form an endless loop comprising two straight branches, between two rotary pulleys carried integrally by each module.

4. (Previously presented) An integrated conveyor system as claimed in claim 2, characterized by also comprising a decelerating station defined by at least one said module having a powered belt and located immediately upstream from the push module; drive means of said at least one module defining the decelerating station gradually varying the linear speed of

the respective powered belt between the speed of the powered belt of the immediately upstream module and the speed of the belt of the push module, within the time interval in which one pad of a truck leaves the belt of said module immediately upstream from the decelerating station, and another pad of the same truck engages the belt of said push module.

5. (Previously presented) An integrated conveyor system as claimed in claim 2, characterized by also comprising an accelerating station defined by at least one said module having a powered belt and located immediately downstream from said brake module; drive means of said at least one module defining the accelerating station gradually varying the linear speed of the respective powered belt between the speed of the idle belt of the brake module and the speed of the powered belt of the module immediately downstream from the accelerating station, within the time interval in which one pad of a truck leaves the idle belt of said brake module, and another pad of the same truck engages the powered belt of the module immediately downstream from the accelerating station.

6. (Previously presented) An integrated conveyor system as claimed in claim 4, characterized in that said decelerating station has electronic control means comprising first sensors for determining the linear speed of the belts of the push module and of the at least one module defining the decelerating station; and second sensors for determining the presence/absence of a truck along an end portion of the pair of rails of the at least one module defining the decelerating station and adjacent to the push module.

7. (Previously presented) An integrated conveyor system as claimed in claim 5, characterized in that said accelerating station has electronic control means comprising first sensors for determining the linear speed of the belts of the brake module and of the at least one module defining the accelerating station; and second sensors for determining the presence/absence of a truck along an end portion of the pair of rails of the brake module.

8. (Previously presented) An integrated conveyor system as claimed in claim 6, characterized in that said electronic control means selectively ensure only one truck at a time engages the belt of the at least one module defining said deceleration station and said accelerating station.

9. (Previously presented) An integrated conveyor system as claimed in claim 2, characterized in that, between respective inner faces of respective branches of each of said powered belts and of said idle belt, there is located a spacer made of antifriction material, and along which slides the inner face of the belt branch facing said trucks.

10. (Currently amended) An integrated conveyor system as claimed in claim 9, characterized in that said powered belts and said[[-L]] idle belt are double-toothed belts; said pads being toothed pads engaging an outer face of a branch of each belt facing said trucks.

11. (Previously presented) An integrated conveyor system as claimed in claim 10, characterized in that said push module comprises, in addition to said powered belt, a second belt, which is stretched between a pair of idle pulleys, has smooth faces, and a branch of which facing said trucks is interposed between the inner face of the corresponding branch of the powered belt of the push module and said spacer of antifriction material.

12. (Previously presented) An integrated conveyor system as claimed in claim 11, characterized in that said push means comprise, for each pad, elastic means for pressing the pad against an outer face of the branch of each belt facing said trucks; and, for said push module, a reduction in the assembly distance between said powered belt and said pair of rails, so as to increase the compression of said elastic means of the truck engaging the push module, and so increase the thrust that can be applied to the truck by said powered belt.

13. (Previously presented) An integrated conveyor system as claimed in claim 1, characterized in that said trucks each have a number of wheels or rollers idly engaging said pairs of rails to guide said trucks both transversely and vertically.

14. (Previously presented) An integrated conveyor system comprising a number of trucks, and a number of independent modules, each comprising a pair of rails, and a powered belt stretched inside the transverse space defined between the pair of rails; the modules being arranged with the pairs of rails end to end to form a substantially continuous support and guide structure for said trucks, which run along said pairs of rails, and each have at least one pair of grip pads, which, with the aid of push means, selectively engage, and are moved along the rails in a predetermined direction by, the powered belts of said modules; the pads of each truck being located such a distance apart that, when one of the trucks leaves a first module to engage a

second module adjacent to the first, at least one pad of said one of the trucks still cooperates with the belt of at least one of said first and second modules; characterized by also comprising:

- a number of modules having no powered belt, and aligned to define a work line;
- a push module having a powered belt and located at a first end of the work line;
- the trucks having stop means for forming, along said work line and downstream from the push module, a train of trucks contacting one another between said rails; the train of trucks being pushed along at a predetermined speed by the powered belt of the push module only; and
- a decelerating station defined by at least one of said modules having a powered belt and located immediately upstream from the push module; drive means of said at least one of said modules defining the decelerating station gradually varying the linear speed of the respective powered belt between the speed of the powered belt of the immediately upstream module and the speed of the belt of the push module, within the time interval in which one pad of one of the trucks leaves the belt of said module immediately upstream from the decelerating station, and another pad of the same truck engages the belt of said push module.

15. (Previously presented) An integrated conveyor system comprising a number of trucks, and a number of independent modules, each comprising a pair of rails, and a powered belt stretched inside the transverse space defined between the pair of rails; the modules being arranged with the pairs of rails end to end to form a substantially continuous support and guide structure for said trucks, which run along said pairs of rails, and each have at least one pair of grip pads, which, with the aid of push means, selectively engage, and are moved along the rails in a predetermined direction by, the powered belts of said modules; the pads of each truck being located such a distance apart that, when one of the trucks leaves a first module to engage a second module adjacent to the first, at least one pad of said one of the trucks still cooperates with the belt of at least one of said first and second modules; characterized by also comprising:

- a number of modules having no powered belt, and aligned to define a work line;
- a push module having a powered belt and located at a first end of the work line;
- a brake module having a nonpowered idle belt and located at a second end of the work line opposite the first end; and
- the trucks having stop means for forming, along said work line and downstream from the push module, a train of trucks contacting one another between said rails; the train of trucks being pushed along at a predetermined speed by the powered belt of the push module only.

16. (New) An integrated conveyor system comprising a number of trucks, and a number of independent modules, each comprising a pair of rails, and a powered belt stretched inside the transverse space defined between the pair of rails; the modules being arranged with the pairs of rails end to end to form a substantially continuous support and guide structure for said trucks, which run along said pairs of rails, and each have at least one pair of grip pads, which, with the aid of push means, selectively engage, and are moved along the rails in a predetermined direction by, the powered belts of said modules; the pads of each truck being located such a distance apart that, when a truck leaves a first module to engage a second module adjacent to the first, at least one pad of the truck still cooperates with the belt of at least one of said first and second modules; characterized by also comprising:

- a number of modules having no powered belt, and aligned to define a work line;
- a push module having a powered belt and located at a first end of the work line;
- the trucks having stop means for forming, along said work line and downstream from the push module, a train of trucks contacting one another between said rails; the train of trucks being pushed along at a predetermined speed by the powered belt of the push module only;
- a brake module having a nonpowered idle belt, and located at a second end of the work line opposite the first end; and
- an accelerating station defined by at least one said module having a powered belt and located immediately downstream from said brake module; drive means of said at least one module defining the accelerating station gradually varying the linear speed of the respective powered belt between the speed of the idle belt of the brake module and the speed of the powered belt of the module immediately downstream from the accelerating station, within the time interval in which one pad of a truck leaves the idle belt of said brake module, and another pad of the same truck engages the powered belt of the module immediately downstream from the accelerating station.

17. (New) An integrated conveyor system comprising a number of trucks, and a number of independent modules, each comprising a pair of rails, and a powered belt stretched inside the transverse space defined between the pair of rails; the modules being arranged with the pairs of rails end to end to form a substantially continuous support and guide structure for said trucks, which run along said pairs of rails, and each have at least one pair of grip pads, which, with the aid of push means, selectively engage, and are moved along the rails in a predetermined direction by, the powered belts of said modules; the pads of each truck being located such a

distance apart that, when a truck leaves a first module to engage a second module adjacent to the first, at least one pad of the truck still cooperates with the belt of at least one of said first and second modules; characterized by also comprising:

- a number of modules having no powered belt, and aligned to define a work line; and
- a push module having a powered belt and located at a first end of the work line;
- the trucks having stop means for forming, along said work line and downstream from the push module, a train of trucks contacting one another between said rails; the train of trucks being pushed along at a predetermined speed by the powered belt of the push module only;
- a brake module having a nonpowered idle belt, and located at a second end of the work line opposite the first end; and
- wherein said powered belts and said idle belt are double-toothed belts, said pads being toothed pads engaging an outer face of a branch of each belt facing said trucks.